



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-50E1 BYPASS RATIO: 4.3
 UNIQUE ID NUMBER: 3GE076 PRESSURE RATIO (π_{00}): 28.4
 COMBUSTOR: Low emissions fuel nozzle
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 230.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	5.3	36.6	59.8	16.1
AS % OF ORIGINAL LIMIT	27.0	31.0	61.7	85.5
AS % OF CAEP/2 LIMIT (NO _x)			77.2	
AS % OF CAEP/4 LIMIT (NO _x)			92.7	
AS % OF CAEP/6 LIMIT (NO _x)			105.3	
AS % OF CAEP/8 LIMIT (NO _x)			124.8	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.361	0.14	0.45	28.97	11.0
CLIMB OUT	85	2.2	1.940	0.15	0.45	25.50	11.7
APPROACH	30	4.0	0.663	0.28	3.71	10.16	1.6
IDLE	7	26.0	0.163	2.72	24.04	3.40	1.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			769	788	6863	11884	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				3.4	29.8	51.6	12.5
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.2	0.4	2.8	1.8
RANGE (D _p /F ₀₀ in g/kN, or SN)				3.28-3.58	29.42-30.28	49.71-54.8	10.68-14

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.7-97.9
TEMPERATURE (K)	292.3-301.3
ABS HUMIDITY (kg/kg)	0.0127-0.0216

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	16.3

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: GE Development/Production Test Operation
 TEST LOCATION: Site IVD, Peebles, Ohio
 TEST DATES: 28/07/1987-29/07/1987

REMARKS

1. Engine equipped with low emissions fuel nozzle config.
2. GE Report R87AEB559.
3. Engine 530375/001.
4. Idle emissions calculated at normal idle setting rather than 7%.

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)